

# LATHAM & WATKINS LLP

February 17, 2017

## **VIA ELECTRONIC FILING**

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: ViaSat, Inc., Notice of *Ex Parte* Presentation

WC Docket Nos. 10-90, 14-58, 07-135, 05-337, and 03-109; GN Docket No. 09-51; CC Docket Nos. 01-92 and 96-45; WT Docket No. 10-208

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Dear Ms. Dortch:

On February 16, 2017, Chris Murphy, Associate General Counsel, Regulatory Affairs, of ViaSat, Inc., Amy Mehlman of Mehlman Capital Strategies, and the undersigned met with Amy Bender and Erin McGrath of Commissioner O’Rielly’s office. We discussed ViaSat’s views regarding the various weighting proposals made in this proceeding. Those views are summarized in the attached letter, which was submitted by ViaSat on February 16, 2017.

Please contact the undersigned should you have any questions.

Respectfully submitted,

/s/ John P. Janka

John P. Janka

*Counsel to ViaSat, Inc.*

cc: Amy Bender  
Erin McGrath

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February 16, 2017

**VIA ELECTRONIC SUBMISSION**

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

**Re: WC Docket Nos. 10-90, 14-58, 07-135, 05-337, and 03-109; GN Docket No. 09-51; CC Docket Nos. 01-92 and 96-45; WT Docket No. 10-208**

Dear Ms. Dortch:

Recent submissions advocating the bid weights to be used in the CAF II reverse auction are not based on how broadband performance characteristics actually impact the consumer broadband experience. Instead, they are based on unsubstantiated assertions, auction gaming scenarios, and speculation about the costs and likely bidding activity of potential auction participants, and the support those participants are likely to require. Several parties advocate weighting schemes explicitly designed to ensure that particular types of technologies become “winners” or “losers” in the reverse auction.

ViaSat submits this letter to: (i) provide its reasoning for adopting certain weights; (ii) make clear that adopting the extreme recommendations of certain parties would likely cause potential participants to sit out the auction; and (iii) correct a number of significant misstatements and mischaracterizations of fact.

**ViaSat’s Proposed Bid Weights**

ViaSat believes that a weighting differential of 20 percent between the “Minimum” (10/1 Mbps) tier and the “Baseline” (25/3 Mbps) tier is appropriate. This reflects the Commission’s determination that 25/3 Mbps speeds ensure that rural consumers are able to “utilize their broadband connections in ways similar to consumers in urban areas,”<sup>1</sup> and that lower speeds essentially provide a “second-best” alternative where faster options are not available.<sup>2</sup> Encouraging Baseline tier speeds is appropriate given the significant benefits that would flow to

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<sup>1</sup> See *Connect America Fund*, 31 FCC Rcd 5949, at ¶ 25 (2016) (“CAF II Report and Order”).

<sup>2</sup> See generally *id.* ¶ 20.

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consumers as a result. ViaSat has seen these benefits first-hand through its experience with customers who have switched from DSL speeds (at 1.5-6 Mbps) to ViaSat's satellite broadband service (at 10/1 Mbps or even 25/3 Mbps) and who have enjoyed significantly better service as a result.

ViaSat believes that it may be appropriate to use more gradual (smaller) weighting differentials between the Baseline tier and the 100/20 Mbps and 1 Gbps tiers. Such an approach would increase the total number of locations that can be served within the limited CAF II budget—instead of providing more costly service to far fewer locations. In addition, this approach would advance the Commission's goal of providing broad deployment of Baseline service while also allowing for even higher initial speeds in CAF II locations. ViaSat is planning to provide its existing residential customers with speed and data packages in excess of the Baseline tier in the near future. ViaSat already provides 25/3 Mbps satellite broadband service with a data allowance of 150 GB.<sup>3</sup>

ViaSat does not believe that the need to impose any latency penalty has been substantiated. If the Commission nevertheless adopts one, it should be no more than 10 percent. While moving between performance tiers impacts the consumer broadband experience across all application types, the latency associated with satellite broadband technologies is not even a consideration for more than a very small percentage of today's broadband traffic. Indeed, compliance with the Commission's Mean Opinion Score ("MOS") requirement ensures that only about 5 percent of traffic could be deemed "latency-sensitive" for CAF II purposes. Furthermore, this number is likely to shrink in the future given the continuing growth of video streaming services. Additional substantiation is presented in Exhibit A.

**Chilling Auction Participation**

ViaSat is concerned that many weighting proposals are based on ill-informed speculation about the cost structures or likely bidding activities of certain auction participants. For example, recent *ex parte* submissions suggest—incorrectly and without foundation—that a "typical" bid from a satellite broadband provider would be as low as 1 percent,<sup>4</sup> or as high as 340 percent,<sup>5</sup> of

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<sup>3</sup> See <http://www.exede.com/freedom/> ("The Exede Freedom plan features an incredible 150 gigabyte monthly data allowance. This is the first satellite internet package to provide a data package this large, and it represents the direction we want to go with our service in the future.").

<sup>4</sup> See Letter from Rural Coalition to FCC, Exhibit, WC Docket No. 10-90 (Feb. 14, 2017) ("Rural Coalition Letter").

<sup>5</sup> See Letter from Hughes Network Systems to FCC, WC Docket No. 10-90, at 2 (Feb. 14, 2017) (asserting that "the lower bound for satellite providers bids" will be above \$185 per customer per month in the 25/3 Mbps tier") ("HNS Letter"). The \$185 per customer per month figure is equivalent to \$2,220 per customer per year, or about 3.4 times the average reserve price of \$652.68. See Exhibit B hereto.

the average reserve price. One proposal goes so far as to assume that satellite providers would make the investment needed to serve CAF II locations for support of about 54 cents per covered location per month (on average).<sup>6</sup> Other proposals are based on similar, false assumptions.<sup>7</sup>

As detailed in the Exhibit B, satisfying CAF II obligations requires material capital commitments, and comes with significant opportunity costs and variable costs. This is true for all technologies, including satellite broadband providers. This is perhaps one reason why some ILECs declined to exercise their rights of first refusal and thus turned down far more support (of as much as thousands of dollars per location) in these areas.

Adopting weighting proposals that relegate satellite broadband technologies to *de minimis* support levels would make it highly unlikely that satellite broadband providers like ViaSat would participate in the auction. At the other extreme, ViaSat would not need the thousands of dollars per year for each covered location that another satellite broadband provider has stated it would require in order to bid for 25/3 Mbps service with 150 MB of data.<sup>8</sup>

### **Gross Misstatements and Mischaracterizations of Fact**

Several recent *ex parte* submissions grossly mischaracterize or misrepresent facts in an effort to denigrate the contribution that satellite broadband service can make to the success of the CAF II auction. Exhibit C responds to the most egregious examples and confirms two fundamental points that are beyond dispute at this late stage in the proceeding: (i) over 90 percent of broadband traffic simply is not latency-sensitive; and (ii) consumers are satisfied with the quality of ViaSat's satellite broadband services. Both of these points are reflected in the insatiable demand for ViaSat's services. Notably, ViaSat has been successful in quickly filling capacity on its satellites and launching a highly successful broadband offering on commercial airliners that provides passengers the same type of broadband experience they have in their homes.

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<sup>6</sup> See Rural Coalition Letter, Exhibit (CAF Auction Weighting). One percent of the \$652.68 reserve price is \$6.53 per year, or \$0.54 per month.

<sup>7</sup> See, e.g., Letter from Southern Tier Wireless to FCC, WC Docket No. 10-90, Att. A at 3 (Sep. 21, 2016) (assuming \$90 per year of costs per location); Letter from USTelecom to FCC, WC Docket No. 10-90, Exhibit (Trade-off Speed Tier and Locations) (Feb. 9, 2017) (same).

<sup>8</sup> See generally HNS Letter.

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For these reasons, ViaSat urges the Commission to adopt auction weights that are consistent with those proposed above and to reject weighting proposals based on the assumed cost structures of certain technologies.

Respectfully submitted,

/s/ John P. Janka

John P. Janka

Jarrett S. Taubman

*Counsel to ViaSat, Inc.*

Encl. (Ex. A, B, C)

cc: Nicholas Degani  
Jay Schwarz  
Claude Aiken  
Amy Bender  
Ryan Palmer  
Alexander Minard  
Katie King  
Heidi Lankau

### **EXHIBIT A: Derivation of Possible Latency Adjustment**

ViaSat does not believe that the need to impose any latency penalty has been substantiated. If the Commission nevertheless adopts one, it should be no more than 10 percent. Unlike the proposals advanced by other parties in this proceeding, ViaSat's recommendation is grounded in objective, empirical data produced by a disinterested third party—Sandvine. Notably, Sandvine has been cited by parties on all sides of the ongoing debate (although at times in an inaccurate fashion).

The table below presents data extracted from *2016 Global Internet Phenomena: Latin America & North America*, the most recent Sandvine report analyzing Internet traffic in the United States.<sup>1</sup>

<b>Category</b>	<b>Sandvine Explanation</b>	<b>Percentage</b>
<u>Real-Time Entertainment</u>	Applications and protocols that allow “on-demand” entertainment that is consumed (viewed or heard) as it arrives	67.35%
<u>Marketplaces</u>	Marketplaces where subscribers can purchase and download media including applications, music, movies, books, and software updates	7.17%
<u>Web Browsing</u>	Web protocols and specific websites	4.98%
<u>Gaming</u>	Console and PC gaming, console download traffic, gaming updates	4.30%
<u>Social Networking</u>	Websites and services focused on enabling interaction (chat, communication) and information sharing (photos, status, etc.) between users	3.89%
<b>Categories Outside of the “Top Five”</b>		
<u>Communications</u>	Applications, services and protocols that allow email, chat, voice, and video communications; information sharing (photos, status, etc.) between users	< 3.89%*
<u>Storage</u>	Large data transfers using the File Transfer Protocol or its derivatives. Services that provide file-hosting, network back-up, and one-click downloads	≥ 8.42%
<u>Administration</u>	Applications and services used to administer the network	
<u>Filesharing</u>	Filesharing applications that use a peer-to-peer or Newsgroups as a distribution models	
<u>Tunneling</u>	Protocols and services that allow remote access to network resources or mask application identity.	

\* The Sandvine report does not provide a specific numerical estimate of the percentage of traffic associated with the Communications category. However, because 3.89% of relevant traffic is associated with the fifth-ranked category—Social Networking—the percentage of traffic associated with any category outside of the “Top Five” must be lower than that figure.

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<sup>1</sup> Available at <https://www.sandvine.com/downloads/general/global-internet-phenomena/2016/global-internet-phenomena-report-latin-america-and-north-america.pdf>.

To summarize the relevant findings, the Sandvine report suggests that over 90 percent of traffic is not latency-sensitive. The remaining amount consists of traffic associated with the Communications and the Gaming categories. The Communications category includes voice services, and any potential impact of latency on such services is already mitigated by the Commission's requirement that "high-latency" bidders meet a Mean Opinion score ("MOS") of four or better. Thus, only the remainder—more than 4 percent and less than about 8 percent of traffic—is relevant for purposes of any potential latency-related weighting metric. For this reason, the only justifiable "latency penalty" possible would be one that does not exceed 10 percent.

## **EXHIBIT B: Assumptions Underlying Expected Auction Participation**

ViaSat does not expect the reverse auction to result in any satellite broadband provider winning a disproportionately high number of bids, whether under the weights ViaSat proposes or otherwise. To the contrary, given the cost of extending service to CAF II households for ten years, ViaSat expects that it would not be the winning bidder in many locations covered by the upcoming auction. While ViaSat's service is extremely cost-effective, and high-quality, it likely is not the most cost-effective solution for every particular location. This is fully consistent with an analysis that ViaSat placed on the record more than five years ago, which has never been refuted by any party.<sup>1</sup>

The Rural Coalition has suggested, without foundation, that satellite providers face extremely low costs and would be able to submit bids as low as 1 percent of the reserve price in any given market.<sup>2</sup> The Rural Coalition's implication is that satellite broadband providers would undercut all other bidders unless the satellite providers were placed at a severe disadvantage through the use of significant bid weights, such as for latency and for speeds below 100/20 Mbps.

Based on Commission data,<sup>3</sup> the average reserve price would be approximately \$652.68 per year per supported location. One percent of this average is \$6.53 per year, or about 54 cents per month. In other words, the Rural Coalition suggests that satellite providers: (i) could economically provide qualifying broadband service in low-volume, widely dispersed service areas, and bearing carrier-of-last-resort obligations, based on support of less than 54 cents per month (on average) over ten years; and (ii) would choose to forego other uses of their capital and their networks for this *de minimis* level of support from the CAF. This simply is not true.

The reality is that satellite providers would incur significant costs to serve households in CAF II areas—costs that are not reflected in the materials submitted by the Rural Coalition, USTelecom, or Southern Tier Wireless.<sup>4</sup> Among other things, those parties fail to account for:

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<sup>1</sup> See Dr. Charles L. Jackson, *Satellite Service Can Help to Effectively Close the Broadband Gap* (Apr. 18, 2011), attached as Exhibit A to Comments of ViaSat, Inc., WC Docket No. 10-90 (Apr. 18, 2011).

<sup>2</sup> See Letter from Rural Coalition to FCC, Exhibit, WC Docket No. 10-90 (Feb. 14, 2017) ("Rural Coalition Letter").

<sup>3</sup> See [https://transition.fcc.gov/wcb/Prelim\\_Phase\\_II\\_Auction\\_Eligible\\_CBs\\_081016.zip](https://transition.fcc.gov/wcb/Prelim_Phase_II_Auction_Eligible_CBs_081016.zip) (preliminary list of census blocks eligible for CAF II auction).

<sup>4</sup> See Rural Coalition Letter; Letter from Southern Tier Wireless to FCC, WC Docket No. 10-90 (Sep. 21, 2016) ("STW Letter"); Letter from USTelecom to FCC, WC Docket No. 10-90 (Feb. 9, 2017).

- (1) The incremental and variable costs of providing satellite broadband service to a given household, many of which terrestrial proponents admit are relevant to their own cost structures;<sup>5</sup>
- (2) The significant research, development, and infrastructure deployment costs that ViaSat would incur as it deploys additional satellite capacity in order to service households in CAF II areas;<sup>6</sup>
- (3) The opportunity costs associated with dedicating satellite capacity (both now and increasingly in the future) to sparsely populated CAF II areas, which costs are particularly high in ViaSat's case considering that (A) about 96 percent of ViaSat's current residential broadband customers live outside CAF II areas, and (B) ViaSat's growing airline broadband business requires significant amounts of capacity to serve passengers on commercial airliners and other types of aircraft;<sup>7</sup> and
- (4) The burdens associated with being a carrier-of-last-resort and an ETC.

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<sup>5</sup> See STW Letter, Att. A at 3 (Sep. 21, 2016).

<sup>6</sup> See, e.g., Q3 2017 ViaSat Earnings Conference Call (Feb. 9, 2017), *available at* <http://investors.viasat.com/events.cfm> (in which CEO Mark Dankberg reported that “[w]ith respect to CapEx, expenditures were up approximately \$124 million from the prior-year period, with the majority of this increase attributed to our ViaSat-3 satellite and the ViaSat-2 program, including the associated ground segments. Total spending in the period across the three projects was about \$209 million so far this year, or roughly double the level spend during the same period last year.”).

<sup>7</sup> See, e.g., Comments of ViaSat, Inc., WC Docket No. 10-90, at 8 (Jul. 21, 2016) (noting that “satellite providers typically have a variety of options with respect to the use of the finite throughput available over a given satellite” and that satellite providers “would incur significant opportunity costs” by foregoing other options, “particularly given the long-term obligations associated with acceptance of CAF support”); *see also* Written Testimony of Michael Rapelyea, Vice President for Government Affairs, ViaSat, Inc. before the Senate Committee on Commerce, Science & Transportation, at 14 (Feb. 4, 2016).

## **EXHIBIT C: Misstatements and Mischaracterizations**

ViaSat takes this opportunity to address several gross misstatements and mischaracterizations of fact in recent *ex parte* submissions in this proceeding. While this list is not intended to be exhaustive, it is intended to correct the record with respect to the most egregious cases:

**First**, in a recent *ex parte* submission the Rural Coalition cites a 2015 Sandvine report to support its claim that more than 75 percent of fixed broadband data usage in North America “is associated with applications that are latency sensitive *and/or* consume substantial amounts of capacity.”<sup>1</sup> As shown in the table included in Exhibit A above, Sandvine data *actually* shows that more than 90 percent of fixed broadband traffic is not latency-sensitive. Although a large percentage of traffic (video streaming) does “consume substantial amounts of capacity,” that traffic is not latency sensitive, and any suggestion to the contrary is both disingenuous and highly misleading.

**Second**, in a recent *ex parte* submission the American Cable Association (“ACA”) claims that messaging (SMS and IM), web browsing, and cloud storage applications are sensitive to latency.<sup>2</sup> ACA provides no basis for this assertion, which ignores the inherent request-response nature of these applications. In truth, these applications—like more than 90 percent of traffic generally—are in no way latency-sensitive.

**Third**, ACA suggests in a footnote that the current level of subscribership to satellite broadband services is an “indication of consumer reaction to service with high latency . . . .”<sup>3</sup> ACA provides absolutely no support for this assertion and establishes no causal connection between latency and subscribership. To the contrary, unrefuted market data on the record show that consumers have embraced satellite broadband service and that ViaSat’s satellite broadband service has an overall user satisfaction rating that is on par with that of leading cable-based broadband service providers.<sup>4</sup> Record evidence also shows that one-third of ViaSat’s broadband customers have switched to satellite from terrestrial broadband alternatives.<sup>5</sup>

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<sup>1</sup> See Letter from Rural Coalition to FCC, WC Docket No. 10-90, at 4 (Jan. 19, 2017) (emphasis added).

<sup>2</sup> See Letter from the American Cable Association to FCC, WC Docket No. 10-90, at 10 (Jan. 30, 2017).

<sup>3</sup> *Id.* at 10 n.31.

<sup>4</sup> See, e.g., Comments of ViaSat, Inc., GN Docket No. 16-245, at 3 (Sep. 6, 2016)

<sup>5</sup> *Id.*

**Fourth**, in another recent *ex parte* submission the Rural Coalition mischaracterizes statements made in ViaSat's petition for reconsideration, in which ViaSat urged the Commission to eliminate a requirement that satellite providers achieve a 30 percent (or higher) penetration level in CAF II areas just three years into the construction period.<sup>6</sup> ViaSat's point was not at all that it would be difficult to achieve a greater level of penetration for satellite broadband service.<sup>7</sup> Rather, ViaSat's point was that it is unfair to require one technology to achieve a level of penetration before the CAF II construction period is even over, when other technologies are not held to any penetration requirement whatsoever.

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<sup>6</sup> See Letter from Rural Coalition to FCC, WC Docket No. 10-90, at 4 & n.8 (Jan. 19, 2017).

<sup>7</sup> See Petition for Reconsideration and Clarification of ViaSat, Inc., at 2-5, WC Docket No. 10-90 (Aug. 8, 2016).